FOCUSED ATTENTION

What is the purpose of shadowing?

The results of dichotic listening experiments show that someone attending to information presented to the right ear will likely be able to report what about the information presented to the left ear?

Research on attention has shown that attention acts like a filter and only lets some information pass through. On this analogy, what does early selection mean?

One theory of selective attention suggests that a filter is placed in between early and late processing. The filter changes the relative strength of the input depending on the situation. Which theory/model of selective attention does this represent?

What do ERP (event-related potential) studies suggest about selective attention?

Which model accounts for variable amounts of filtering at the perceptual level?

The pattern of deficit seen in hemineglect patients supports a/an _______ model of attention, while the pattern of deficit seen in Balint's syndrome supports a/an _______ model of attention.

By using the _____ technique, Sperling demonstrated that the capacity of the sensory store was _____ than had previously been thought

In a dichotic listening task, where subjects shadow a message in one ear while ignoring a message in the other ear, what is the best evidence in support of early attentional selection?

What is the “spotlight” model of attention? What research findings can it explain?

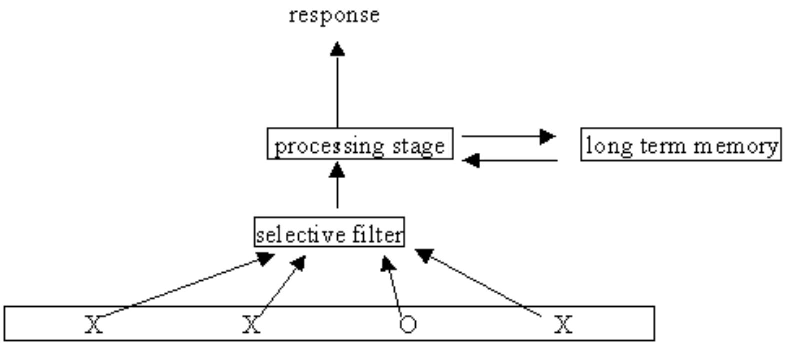
What does the change blindness study reveal?

The partial report procedure has been used to measure the capacity of sensory memory. What is the conclusion from these studies (assume that participants are shown 3 rows consisting of 4 items each)?

What is the major implication of the large capacity of the sensory store for our understanding of attention?

According to an early selection filter theory, if you have an intense phone conversation while a movie is playing on TV, what would your knowledge of the movie be like?

Subjects are briefly shown a set of eight letters, and then asked to immediately report as many of the letters as they can. Subjects are then shown a set of sixteen letters, and again asked to report as many as they can. What is the most likely result?



Consider this model of attention.

According to this model, how does attention work?

Which of the models that we discussed in class is this model most similar to?

Which model(s) is it least similar to?

In an experiment testing this model, you tell subjects that they are supposed to report the color of the "O" in the display. They should ignore anything else. However, you find that varying the color of the "Xs" in the display can cause the subject to be less accurate in the task. What change should be made to the MODEL to make it accommodate this experimental data from people?

DIVIDED ATTENTION

Which model/theory posits that the role of attention is to bind features together into objects?

Longer reaction times to a secondary task in a dual task situation relative to when the task is performed by itself would indicate what?

Feature integration theory argues that a central function of attention is to do what?

The psychological refractory period is due to a bottleneck in which cognitive process(es)?

What does research on the psychological refractory period suggest should happen as the interval between the presentation of two tasks gets shorter?

What have visual search tasks told us about the attentional demands of searching for one versus multiple features?

It is more difficult to search for a conjunction target than a feature target because?

To deal with all the reading she has to do for classes, Jessica has started multitasking. She has found that she's really good at reading while doing her morning exercises, but when she tries to read during phone calls to her parents, she often has to reread a lot of her homework and ends up asking her parents to repeat themselves a lot. What could explain Jessica's multitasking problems?

Kelly notices that when she is talking to her sister on the phone she can play internet card games with little difficulty but she has a really hard time filling out the on-line crossword puzzle. What should she conclude about these tasks?

A subject is playing a video game and is then asked to do additional tasks. He can talk on the phone and remember a shopping list with no decrement in performance on the game. However, when asked to look for targets on another video game (presented on an adjacent screen), his performance drops sharply. This supports what conclusion about attentional resources?

What kind of experimental finding supports the idea that there are specific attentional resources?

If we are doing a single feature search for an object in a search environment that varies in display size, what should the average effect on the response times be to support the hypothesis that individual features can be detected automatically?

In a dual task experiment, a subject performs an auditory task and a visual task together and then each alone. The results show that the subject can perform each task as well when they are combined as when they are done individually. This is consistent with which types of divided attention views/models? Which views, if any, is it inconsistent with?

For the same two tasks, some subjects are found to have a high dual task cost whereas others have no dual task cost. What is most likely the reason?

TRUE OR FALSE

According to the capacity theory of attention:

(1) two tasks will be difficult to perform at the same time if they both draw significantly from the same limited pool of resources.

(2) shifts in resource allocation priorities can lead to shifts in performance.

(3) multiple tasks that do not require much cognitive effort should not interfere with each other.

TRUE OR FALSE (CONTINUED)

According to the Feature Integration Model (Treisman & Gelade, 1980):

(1) some information can be processed rapidly (and with little attention).

(2) attention combines features into objects. This consists of a rapid initial process where visual features of the environment are processed in parallel, and a second, serial process that combines features at the same locations to make objects.

(3) search is more difficult, and takes more time, when multiple features must be used to discriminate an object

(4) search time will always be a linear function of the number of items in the display

(5) when an object appears at a location outside of where attention is directly focused, there is a tendency to improperly bind features (illusory conjunctions)